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Finnegan, Henderson, Farabow,
Garrett & Dunner, L.L.P.
1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER	
ALHIJA, SAIF A	

ART UNIT	PAPER NUMBER
2128	

DATE MAILED: 11/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/024,267	LIND, JEFFERY D.	
	Examiner	Art Unit	
	Saif A. Alhija	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-51 have been presented for examination based on the application filed on 21 December 2001.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claim(s) 1-51** are rejected under 35 U.S.C. 102(e) as being clearly anticipated by **Bradbury et al. "System and Method for Rapidly Customizing a Design and Remotely Manufacturing Biomedical Devices using a Computer System." U.S. Patent Publication # 2002/0007294, hereafter referred to as Bradbury.**

Regarding Claim 1:

Bradbury discloses A method for simulating one or more components, comprising:

establishing an engineering model of a component **(Paragraph 15, Lines 7-8);**

receiving selection data for configuring the component from a user **(Paragraph 15, Lines 3-5);**

establishing a web-based model of the component based on the selection data and the engineering model **(Paragraph 14, Lines 3-5);**

and performing a simulation of the web-based model **(Paragraph 14, Lines 7-9).**

Regarding Claim 2:

Bradbury discloses The method of claim 1, wherein performing the simulation of the web-based model includes: performing the simulation of the web-based model in a simulation environment. **(Paragraph 22, Lines 2-6)**

Regarding Claim 3:

Bradbury discloses The method of claim 1, further including: providing, to the user, feedback data reflecting characteristics of the web-based model during the simulation. **(Paragraph 29, Lines 1-3)**

Regarding Claim 4:

Bradbury discloses The method of claim 1, wherein receiving selection data includes: providing an option to the user reflecting a sub-component that may be associated with the component, wherein the selection data includes the sub component selected by the user. **(Paragraph 26, Lines 1-5)**

Regarding Claim 5:

Bradbury discloses The method of claim 4, wherein providing an option further includes: providing, to the user, a web-based model of the sub-component based on a corresponding engineering model of the sub-component. **(Paragraph 14, Lines 3-5)**

Regarding Claim 6:

Bradbury discloses The method of claim 5, wherein the web-based model of the sub-component is a 3D image of the sub-component that may be manipulated by the user. **(Paragraph 22, Lines 1-2 and Paragraph 26, Lines 1-5)**

Regarding Claim 7:

Bradbury discloses The method of claim 1, wherein establishing a web-based model of the component includes: detecting a change to the engineering model of the component; and updating the web-based model of the component based on the detected change. **(Paragraph 29, Lines 1-3)**

Regarding Claim 8:

Bradbury discloses The method of claim 1, wherein establishing a web-based model of the component includes: lightening the engineering model; and establishing the web-based model based on the lightened engineering model. **(Paragraph 26, Lines 1-5)**

Regarding Claim 9:

Bradbury discloses The method of claim 1, wherein the web-based model is a 3D image model. **(Paragraph 22, Lines 1-2)**

Regarding Claim 10:

Bradbury discloses The method of claim 1, wherein the web-based model includes a 3D image model of the component and textual data associated with at least one of physical,

functional, and marketing characteristics of the component. **(Paragraph 31, Lines 1-5)**

Regarding Claim 11:

Bradbury discloses The method of claim 1, wherein performing a simulation of the web-based model includes: providing, to the user, one or more options reflecting various simulation environments that the web-based model may be simulated within; receiving a selection from the user reflecting a selected simulation environment; and performing a simulation of the web-based model in the selected simulation environment. **(Paragraph 27, Lines 5-8)**

Regarding Claim 12:

Bradbury discloses The method of claim 1, wherein performing a simulation of the web-based model includes: allowing the user to control the operation of the web-based model using an input interface; and performing simulations of the web-based model in the simulation environment based on data received from the input interface. **(Paragraph 15, Lines 3-5)**

Regarding Claim 13:

Bradbury discloses The method of claim 2, wherein the simulation environment includes a simulated load and wherein performing a simulation of the web-based model includes simulating a manipulation of the simulated load by the web-based model. **(Paragraph 32, Lines 5-12 and Paragraph 34, Lines 1-4)**

Regarding Claim 14:

Bradbury discloses The method of claim 13, further including: providing, to the user, feedback data reflecting at least one of physical and functional characteristics of the web-based model based on the simulated manipulation. **(Paragraph 32, Lines 5-12)**

Regarding Claim 15:

Bradbury discloses The method of claim 2, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment that may be associated with the configured web-based model, and wherein performing a simulation of the web-based model includes simulating operation of the web-based model in the simulated work environment. **(Paragraph 26, Lines 12-15)**

Regarding Claim 16:

Bradbury discloses The method of claim 15, further including: providing, to the user, feedback data reflecting at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 17:

Bradbury discloses The method of claim 1, wherein the simulation environment includes a simulated surface and wherein performing a simulation of the web-based model includes simulating operation of the web-based model on the simulated surface. **(Paragraph 32, Lines 5-12)**

Regarding Claim 18:

Bradbury discloses The method of claim 17, further including: providing, to the user, feedback data reflecting at least one of physical and functional characteristics of the web-based model based on the simulated operation. **(Paragraph 32, Lines 5-12)**

Regarding Claim 19:

Bradbury discloses The method of claim 2, wherein the simulation environment includes a type of work environment and a work operation to be performed by the web-based model in the work environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 20:

Bradbury discloses The method of claim 19, wherein performing the simulation of the web-based model includes: establishing a plurality of duplicate web-based models of the component; and simulating the work operation in the work environment using the duplicate web-based models. **(Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)**

Regarding Claim 21:

Bradbury discloses The method of claim 20, further including: providing, to the user, feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation **(Paragraph 29, Lines 1-3).**

Regarding Claim 22:

Bradbury discloses The method of claim 20, further including: providing, to the user, feedback data reflecting performance information associated with the work operation in the work environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 23:

Bradbury discloses The method of claim 20, wherein simulating the work operation in the work environment further includes: allowing the user to adjust the number of duplicate web-based models performing the work operation and to adjust the configuration of the duplicate web-based models. **(Paragraph 35, Lines 5-8)**

Regarding Claim 24:

Bradbury discloses The method of claim 2, wherein the simulation environment is a virtual repair environment. **(Paragraph 14, Lines 10-12 and Paragraph 33, Lines 9-13)**

Regarding Claim 25:

Bradbury discloses The method of claim 24, wherein performing simulations of the web-based model includes: allowing the user to perform a virtual repair of the web-based model in the virtual repair environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 26:

Bradbury discloses The method of claim 2, wherein the simulation environment is a virtual training environment and performing simulations of the web-based model includes providing instructional information to the user while the user operates the web-based model in the virtual training environment, wherein the instructional information may include at least one of

image, voice, and textual information instructing the user on the operation of the web-based model. **(Paragraph 32, 5-12)**

Regarding Claim 27:

Bradbury discloses A system for simulating one or more components, comprising: a client system operated by a user; and a server system, including: a process for receiving configuration data from the client system reflecting a configuration of a component selected by the user; a process for establishing a web-based model of the component based on the configuration data and an engineering model of the component; a process for providing, to the client system, a simulation of the web-based model; and a processor for executing the processes for receiving, creating, and providing. **(Paragraph 14, Lines 3-5, 7-9 and Paragraph 5, Lines 3-5, 7-8)**

Regarding Claim 28:

Bradbury discloses The system of claim 27, wherein the process for providing includes a process for providing, to the client system, feedback data reflecting characteristics of the web-based model during the simulation. **(Paragraph 29, Lines 1-3)**

Regarding Claim 29:

Bradbury discloses The system of claim 27, wherein the process for establishing a web-based model of the component includes: a process for detecting a change to the engineering model of the component; and a process updating the web-based model of the component based on the detected change. **(Paragraph 29, Lines 1-3)**

Regarding Claim 30:

Bradbury discloses The system of claim 27, wherein the process for establishing a web-based model of the component includes: a process for lightening the engineering model; and a process for establishing the web-based model based on the lightened engineering model. **(Paragraph 26, Lines 1-5)**

Regarding Claim 31:

Bradbury discloses The system of claim 27, wherein the process for providing a simulation of the web-based model includes: a process for providing, to the client system, one or more options reflecting various simulation environments that the web-based model may be simulated within; a process for receiving a selection from the client system reflecting a simulation environment selected by the user; and a process for performing a simulation of the web-based model in the selected simulation environment. **(Paragraph 27, Lines 5-8)**

Regarding Claim 32:

Bradbury discloses The system of claim 31, wherein the process for providing a simulation of the web-based model includes: a process for receiving input data from the client system; and a process for manipulating the web-based model in the selected simulation environment based on the input data. **(Paragraph 15, Lines 3-5)**

Regarding Claim 33:

Bradbury discloses The system of claim 27, wherein the process for performing a simulation of the web-based model includes a process for simulating operation of the web-

based model in a simulation environment, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment that may be associated with the configured web-based model and wherein the process for performing a simulation of the web-based model includes a process for simulating operation of the web-based model in a simulated work environment. **(Paragraph 26, Lines 12-15)**

Regarding Claim 34:

Bradbury discloses The system of claim 33, further including: a process for providing feedback data reflecting at least one of physical and functional characteristics of the web-based model during the simulating operation. **(Paragraph 32, Lines 5-12)**

Regarding Claim 35:

Bradbury discloses The system of claim 27, wherein the process for providing the simulation of the web-based model includes: a process for establishing a plurality of duplicate web-based models of the component; and a process for simulating a selected work operation in the selected simulation environment using the duplicate web-based models. **(Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)**

Regarding Claim 36:

Bradbury discloses The system of claim 35, further including: a process for providing feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation. **(Paragraph 29, Lines 1-3)**

Regarding Claim 37:

Bradbury discloses The system of claim 27, wherein the process for providing a simulation of the web-based model includes a process for simulating a virtual repair of the web-based model in a simulation environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 38:

Bradbury discloses A computer-readable medium including instructions for performing a method, when executed by a processor, for simulating one or more components, the method comprising: establishing an engineering model of a component; receiving selection data for configuring the component from a user; establishing a web-based model of the component based on the selection data and the engineering model; and performing a simulation of the web-based model. **(Paragraph 14, Lines 3-5, 7-9 and Paragraph 5, Lines 3-5, 7-8)**

Regarding Claim 39:

Bradbury discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes: performing a simulation of the web-based model in a simulation environment. **(Paragraph 22, Lines 2-6)**

Regarding Claim 40:

Bradbury discloses The computer-readable medium of claim 38, further including: providing, to the user, feedback data reflecting characteristics of the web-based model during the simulation. **(Paragraph 29, Lines 1-3)**

Regarding Claim 41:

Bradbury discloses The computer-readable medium of claim 38, wherein establishing a web-based model of the component includes: detecting a change to the engineering model of the component; and updating the web-based model of the component based on the detected change. **(Paragraph 29, Lines 1-3)**

Regarding Claim 42:

Bradbury discloses The computer-readable medium of claim 38, wherein establishing a web-based model of the component includes: lightening the engineering model; and establishing the web-based model based on the lightened engineering model. **(Paragraph 26, Lines 1-5)**

Regarding Claim 43:

Bradbury discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes: providing one or more options reflecting various simulation environments that the web-based model may be simulated within; receiving a selection from the client system reflecting a simulation environment selected by the user; and performing a simulation of the web-based model in the selected simulation environment. **(Paragraph 27, Lines 5-8)**

Regarding Claim 44:

Bradbury discloses The computer-readable medium of claim 43, wherein performing a simulation of the web-based model includes: receiving input data; and manipulating the web-

based model in the selected simulation environment based on the input data. **(Paragraph 15, Lines 3-5)**

Regarding Claim 45:

Bradbury discloses The computer-readable medium of claim 39, wherein the simulation environment includes a simulated work environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment that may be associated with the configured web-based model and wherein performing a simulation of the web-based model includes simulating operation of the web-based model in the simulated work environment. **(Paragraph 26, Lines 12-15)**

Regarding Claim 46:

Bradbury discloses The computer-readable medium of claim 45, further including: providing, to a user, feedback data reflecting at least one of physical and functional effects of the web-based model based on the simulated operation in the simulated work environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 47:

Bradbury discloses The computer-readable medium of claim 38, wherein performing the simulation of the web-based model includes: establishing a plurality of duplicate web-based models of the component; and simulating a selected work operation in the selected simulation environment using the duplicate web-based models. **(Paragraph 15, Lines 3-5, and 7-8 and Paragraph 14, Lines 3-5, and 7-9)**

Regarding Claim 48:

Bradbury discloses The computer-readable medium of claim 47, further including: providing, to a user, feedback data reflecting characteristics of the duplicate web-based models during the simulated work operation. **(Paragraph 29, Lines 1-3)**

Regarding Claim 49:

Bradbury discloses The computer-readable medium of claim 38, wherein performing a simulation of the web-based model includes simulating a virtual repair of the web-based model in a simulation environment. **(Paragraph 32, Lines 5-12)**

Regarding Claim 50:

Bradbury discloses a method for simulating one or more components of a work machine, comprising:

Establishing an engineering model of a component of a work machine; **(Paragraph 15, Lines 7-8. Paragraph 86, Lines 11-15)**

Receiving selection data for configuring the component from a user; **(Paragraph 15, Lines 3-5)**

Establishing a web-based model of the component based on the selection data and the engineering model; **(Paragraph 14, Lines 3-5)**

and performing a simulation of the web-based model. **(Paragraph 14, Lines 7-9).**

Regarding Claim 51:

Bradbury discloses a system for simulating one or more components of a work machine, comprising;

A client system operated by a user; and **(Paragraph 14, Lines 3-5, and 7-9)**

A server system, **(Paragraph 14, Lines 3-5, and 7-9)** including:

A process for receiving configuration data from the client system reflecting a configuration of a component of a work machine selected by the user; **(Paragraph 15, Lines 3-5. Paragraph 86, Lines 11-15)**

A process for establishing a web-based model of the component based on the configuration data and an engineering model of the component; **(Paragraph 15, Lines 3-5. Paragraph 86, Lines 11-15)**

A process for providing, to the client system, a simulation of the web-based model; **(Paragraph 14, Lines 7-9)**

And a processor for executing the processes for receiving, creating, and providing. **(Paragraph 14, Lines 7-9)**

Response to Arguments

3. Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive.

A) Applicant argues that **Bradbury** does not disclose establishing an engineering model. However, **Bradbury** does disclose ***"a multi-dimensional model is constructed from transmitted data" (Paragraph 15, Lines 7-8).*** A model constructed based on data is an engineering model. An engineering model is defined as the practical application of science to commerce or industry that can

result in a building or structure, map, geological survey, patent, schematic drawing, technical report. In addition, **Bradbury** discloses ***"products as complicated as automobiles, to cut inventories and to offer more individualized and yet still rapid response to customer needs by manufacturing to order" (Paragraph 86, Lines 11-15).*** Manufacturing to order of an automobile is also an example of an engineering model.

B) Applicant argues that **Bradbury** does not disclose receiving selection data for configuring the component from a user. However, **Bradbury** does disclose, ***"patient specific data ... provided by the attending physician regarding the surgical or reconstruction site." (Paragraph 15, Lines 3-5).*** The patient specific data disclosed in Bradbury is a form of selection data resulting in the configuration of the component.

C) Applicant argues that **Bradbury** does not disclose a web-based model of the component based on the selection data and the engineering model. However, **Bradbury** does disclose ***"modeling transmissions, wherein such transmissions are transferred via a computer network such as the Internet. (Paragraph 14, Lines 3-5).*** The model is transferred via a network such as the internet which would result in a web-based model of the component, in this case in order to allow a physician to access the model designed based on the selection data discussed above.

D) Applicant argues that **Bradbury** does not teach performing a simulation of the web-based model. However, **Bradbury** does disclose ***"modeling transmissions, wherein such transmissions are transferred via a computer network such as the Internet. (Paragraph 14, Lines 3-5)*** as well as ***"Creating***

multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like." (Paragraph 27, Lines 5-7) as well as ***"If modeling rules for ingrowth of bone or reabsorption of implant material into the body are known, it would even be possible to simulate the time-progression of growth processes after the implant is implanted in the patient." (Paragraph 33, Lines 9-13).*** Trying out different surgical approaches, attachment points, final cosmetic fit, and the like is a form of simulation of the component in order to allow for proper fit of the component. In addition, the simulation of the implant and its environment are discussed in **Bradbury.**

E) Applicant argues that **Bradbury** does not disclose performing the simulation of the web-based model in a simulation environment. However, **Bradbury** does disclose ***"information available to the surgeon before the operation" (Paragraph 60, Lines 2-3)*** and ***"Creating multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like." (Paragraph 27, Lines 5-7).*** Since an operation is performed in an operating room or a hospital environment, **Bradbury** clearly discloses performing the simulation of the component in a simulation environment.

F) Applicant argues that **Bradbury** does not teach providing to a user feedback data reflecting characteristics of the web-based model during the simulation. However, **Bradbury** does disclose, ***"Creating multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like" (Paragraph 27, Lines 5-7)*** as well as

"avoiding interferences of ordinary mechanical parts as they are being assembled" (Paragraph 32, Last 2 Lines). User feedback is in fact provided in terms of the characteristics of the implant, such as attachment points etc., discussed in **Bradbury.**

G) Applicant argues that **Bradbury** does not disclose updating the web-based model of the component based on the detected change to the engineering model of the component. However, **Bradbury** does disclose ***"avoiding interferences of ordinary mechanical parts as they are being assembled" (Paragraph 32, Last 2 Lines)*** with regards to the model of the component in **Bradbury**. Altering characteristics of the model in **Bradbury** will be updated in the model for the final appropriate design discussed in **Bradbury**.

H) Applicant argues that **Bradbury** does not disclose lightening the engineering model and establishing the web-based model based on the lightened engineering model. However, **Bradbury** does disclose ***"removal or addition of material" (Paragraph 26, Lines 2-3)*** of the model. This would in fact cause the model of the component discussed in **Bradbury** to become lighter or heavier.

J) Applicant argues that **Bradbury** does not teach a simulated environment reflecting any type of terrain, underwater, water surface, outer space, subterranean, and atmospheric work environment. However, **Bradbury** does disclose ***"information available to the surgeon before the operation" (Paragraph 60, Lines 2-3)*** and ***"Creating multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like." (Paragraph 27, Lines 5-7).*** Since an operation is performed in an operating room or a hospital environment, **Bradbury**

clearly discloses performing the simulation of the component in a simulation environment representative in **Bradbury** as an operating room, which is an atmospheric work environment.

K) Applicant argues that **Bradbury** does not teach simulating a manipulation of a simulated load by the web-based model. However, **Bradbury** does disclose, ***"analysis, which is linked to the multi-dimensional model derived from the patient-specific radiological data, could provide patient-unique calculated stress margins with respect to defined loads" (Paragraph 34, Lines 4-7).*** **Bradbury** discloses simulating a manipulation of a simulated load in the form of stress margins for the modeled component.

L) Applicant argues that **Bradbury** does not disclose establishing a plurality of duplicate web-based models of the component, and simulating the work operation in the work environment using the duplicate web-based models. However, **Bradbury** does disclose ***"modeling transmissions, wherein such transmissions are transferred via a computer network such as the Internet." (Paragraph 14, Lines 3-5).*** Since the model is web-based, multiple parties can access the model, ***"such a system could provide the medical field a capability of concurrent design or collaborative or interactive design" (Paragraph 35, Lines 8-10),*** and therefore duplicate models would be created. If a group of individuals wish to access the model, they will each be interacting with a duplicate of the model that has been created and transmitted and they will also have access to simulate the work operation of the models as discussed above.

M) Applicant argues that **Bradbury** does not teach allowing the user to adjust the number of duplicate web-based models, and performing a virtual repair of a web-

based model. However, **Bradbury** does disclose ***"Access to the website or appropriate portions of the website for specific users or categories of users can be controlled by passwords or similar methods." (Paragraph 62, Lines 3-5).*** **Bradbury** allows controlling the access of multiple parties to the web-based models thereby limiting the number of users and therefore limiting the number of duplicate web-based models. With respect to performing a virtual repair of a web-based model, **Bradbury** discloses ***"geometric modification" (Paragraph 29, Line 1)*** which is a component modification as well as ***"Creating multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like" (Paragraph 27, Lines 5-7)*** as well as ***"avoiding interferences of ordinary mechanical parts as they are being assembled" (Paragraph 32, Last 2 Lines).*** **Bradbury** clearly discloses the altering of component characteristics, which is a manner of repairing a component in order to conform to a needed final design.

N) Applicant argues that **Bradbury** does not teach providing instructional information to the user while the user operates the web-based model in the virtual training environment. However, **Bradbury** does disclose, ***"sections of the multi-dimensional models can be calculated in orientations that resemble those of the original diagnostic radiographs for purposes of comparison. Thus, the doctor/patient can view what a CT, MRI, simple X-ray, or other diagnostic should look like after implantation of the proposed part." (Paragraph 33, Lines 1-6).*** The instructional information in the form of post-operative orientations are provided to the user in the virtual training environment

with regards to the position, placement, and other characteristics of the component implant, as discussed in **Bradbury**.

O) Applicant argues that **Bradbury** does not teach a process for manipulating the web-based model in a selected simulation environment based on input data. However, **Bradbury** does disclose, ***"Creating multi-dimensional model advantageously allows trying out different surgical approaches, attachment points, final cosmetic fit and the like." (Paragraph 27, Lines 5-7)*** as well as ***"CAD software allows geometric manipulation of an original design of a part such as to add material..." (Paragraph 25, Lines 4-6).*** **Bradbury** discloses the ability of the user to manipulate the design component as well determining and manipulating the components characteristic abilities in order to conform to a needed final design.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references include:

A) **"Improving the Aircraft Design Process Using Web-Based Modeling and Simulation".** ACM Transactions on Modeling and Computer Simulation, Vol. 10, No. 1, January 2000, Pages 58–83. John A. Reed, Gregory J. Follen, and Abdollah A. Afjeh. January 2000.

B) **"Web Based Modeling and Simulation".** Proceedings of the 2000 Winter Simulation Conference. S. Narayanan. 2000.

6. All Claims are rejected.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Saif A. Alhija whose telephone number is (571) 272-8635. The examiner can normally be reached on M-F, 11:00-7:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah can be reached on (571) 272-2279. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 20, 2005

KAMINI SHAH
PRIMARY EXAMINER
SPE AU 2128